



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

09/10/2001

MEMORANDUM

SUBJECT: **Diuron** Chronic Dietary Exposure Assessment (PC Code 035505); DP Barcode D276683; Case 0046.

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Executive Summary

This chronic dietary exposure assessment was conducted for the herbicide diuron to estimate the dietary risk associated with registered uses of this product. Diuron is used on a wide variety of food and feed crops. Residue levels from USDA and FDA monitoring programs do not include all residues of concern needed for this assessment (diuron and metabolites converted to 3,4- DCA) and would be inappropriate for this analysis. Anticipated residues (ARs) from field trial data were utilized to estimate the dietary exposure to diuron from the diets of the U.S. population, as well as certain population subgroups. These ARs were developed previously (D250038, R. Loranger, 10/08/1998, and D169227, C. Swartz 02/13/1992). With the exception of residue data from processing of sugarcane into refined sugar and molasses, the only refinements to the residue data are the use of averaged percent crop treated (%CT) information (BEAD email messages from Rafael Prieto 6/14/2001 and Alan Halverson, 4/27/2001).

Estimated chronic dietary risks associated with the use of diuron do not exceed HED's level of concern (>100% cPAD) for the US population or any population subgroup examined. The chronic dietary

risk estimates for the US population and children aged 1-6 years (the highest exposed group) are approximately 3% and 7% cPAD, respectively. Approximately 40% of the exposure to diuron from food is from orange juice and orange juice concentrate.

The registrants have committed to label changes which would restrict the application of diuron to asparagus plantings prior to appearance of spears. Residues of diuron in/on asparagus are reduced by approximately one order of magnitude (from 2.8 to 0.26 ppm) by this proposed use. To examine the effect of the residue value on the dietary exposure, calculations were performed using residues levels reflecting treatment of asparagus crops before and after spears appear. There were minimal changes in the chronic exposure estimates using data from the pre-emergence or post-emergence applications of diuron to asparagus.

Estimated cancer risk from exposure to diuron from food exceeds HED's level of concern ($>1.0 \times 10^{-6}$) for the US population. The lifetime cancer risk for the US population is approximately 2×10^{-6} .

Toxicological Information

On June 18, 2001, the Hazard Identification Assessment Review Committee (HIARC) met to discuss acute and chronic hazard endpoint selection for dietary exposure to diuron (Table 1). In a meeting on August 7, 2001, the Food Quality Protection Act (FQPA) Safety Factor Committee recommended that the 10X FQPA Safety Factor (as required by Food Quality Protection Act of August 3, 1996) be **reduced** to **1X** in assessing the potential risks posed by diuron use (B. Tarplee memo, 09/01/01).

Chronic and Cancer Endpoints:

Table 1: Doses and Endpoints Selected for Chronic Dietary Risk Assessment

EXPOSURE SCENARIO	DOSE (mg/kg/day)	ENDPOINT
Acute Dietary	No appropriate endpoint attributed to a single dose was identified; therefore, an acute RfD was not established.	
Chronic Dietary	LOAEL =1.0 UF = 300 FQPA=1x	Evidence of hemolytic anemia and compensatory hematopoiesis.
		CPAD=Chronic RfD = 0.003 mg/kg/day
Cancer	Known/likely human carcinogen $Q^*=1.191 \times 10^{-2}$.	Urinary bladder carcinoma in both sexes of the Wistar rat, kidney carcinomas in the male rat (a rare tumor), and mammary gland carcinomas in the female NMRI mouse.

Consumption Data and Dietary Risk Analysis

The diuron chronic dietary exposure assessment was conducted using the Dietary Exposure Evaluation Model (DEEMTM) software Version 7.73, which incorporates consumption data from USDA's Continuing Surveys of Food Intake by Individuals (CSFII), 1989-1992. The 1989-92 data are based on the reported consumption of more than 10,000 individuals over three consecutive days, and therefore represent more than 30,000 unique "person days" of data. Foods "as consumed" (e.g., apple pie) are linked to raw agricultural commodities and their food forms (e.g., apples-cooked/canned or wheat-flour) by proprietary recipe translation files within DEEM. Consumption data are averaged for the entire US population and within population subgroups for chronic exposure assessment. For chronic exposure and risk assessment, an estimate of the residue level in each food or food-form (e.g., orange or orange-juice) on the commodity residue list is multiplied by the average daily consumption estimate for that food/food form. The resulting residue consumption estimate for each food/food form is summed with the residue consumption estimates for all other food/food forms on the commodity residue list to arrive at the total estimated exposure. Exposure estimates are expressed in mg/kg body weight/day and as a percent of the cPAD.

Residue Information

Diuron Use:

Diuron is a substituted urea herbicide used for the control of a wide variety of annual and perennial broadleaves and grassy weeds on both crop and noncrop sites. Its main use is as a pre-emergent, soil applied herbicide, but it can also be used to control emerged weeds. Diuron formulation classes registered for food/feed uses include wettable powder, emulsifiable concentrate, dry flowable, and flowable concentrate. These formulations are typically applied preplant, preemergence, soil directed, or postemergence treatments using ground or aerial equipment. Tolerances have been established for a number of commodities and are listed in 40 CFR §180.106.

Anticipated residues from field trial data were utilized to estimate the dietary exposure to diuron from the diets of the U.S. population, as well as certain population subgroups. These ARs were developed previously (D250038, R. Loranger, 10/08/1998, and D169227, C. Swartz 02/13/1992). With the exception of residue data from processing of sugarcane into refined sugar and molasses, the only refinements to the residue data are the use of average %CT information (BEAD email messages from Rafael Prieto 6/14/2001 and Alan Halvorson, 4/27/2001).

Table 2. Anticipated Residues to be Used in Chronic Dietary Assessment

Commodity	Reassessed Tolerance	Weighted Average % CT	Anticipated Residue
Apples	0.10	13	0.016*
Juice	--	13	use DEEM default
Artichokes	TBD(1)	2***	0.3**
Asparagus	7.0	53	2.8**
Asparagus (preemergence use)	TBD	53	0.26**
Banana	0.05	14***	0.025**
Barley grain	0.20	1	0.20
Barley bran	--	1	0.30
Birdsfoot trefoil	TBD(0.1)	1	--
Blackberries	0.10	53	0.10
Blueberries	0.10	29	0.10
Boysenberries	0.10	7	0.10
Cattle, fat	TBD(1)	100	0.000003**
Cattle, meat	TBD(1)	100	0.000001**
Cattle, meat byproducts	TBD(1)		--
Liver	--	100	0.00005**
Kidney	--	100	0.000026**
Grapefruit	TBD(1)	47	0.012**
Lemons	TBD(1)	26	0.05*

Oranges	TBD(1)	51	0.030**
Oranges, juice	--	51	default**
Limes	TBD(1)	33	0.05*
Tangelos	TBD(1)	47	0.05*
Tangerine	TBD(1)	30	0.05*
Temples	TBD(1)	51	0.05*
Citrus oil	TBD(21x)	--	--
Corn, grain, pop	0.01	1	0.086*
Corn, grain, field	0.01	1	0.086*
Cottonseed	0.20	11	0.02 oil**/0.1 meal**
Currants	0.10	32	0.10
Dewberries	0.10	53	0.10
Eggs whole yolks whites	0.05	100	0.00026** 0.00069** 0.000027**
Goats, fat	TBD(1)		see cattle
Goats, meat	TBD(1)		see cattle
Goats, meat byproducts	TBD(1)		see cattle
Gooseberries	0.10	32	0.10
Grapes	0.05	10	0.021*
Grapes, juice and raisins	--	10	0.021**
Hogs, fat	TBD(1)	100	see cattle
Hogs, meat	TBD(1)	100	see cattle
Hogs, meat byproducts	TBD(1)	100	see cattle

Horses, fat	TBD(1)	100	see cattle
Horses, meat	TBD(1)	100	see cattle
Horses, meat byproducts	TBD(1)	100	see cattle
Huckleberries	0.10	29	0.10
Loganberries	0.10	33***	0.10
Nuts	0.10	--	--
Almonds	0.10	1	0.10
Filberts	TBD	14	0.10
Macadamia/pistachio	0.10	5	0.10
Pecans	0.10	3	0.10
Walnuts	0.10	12	0.10
Milk	TBD	--	0.000058**
Oat, grain	0.10	1	0.10
Olives	TBD (1)	24	1.0/1.0 oil
Papayas	0.50	13***	0.50
Peaches	0.10	10	0.10
Pears	TBD(1)	9	0.016*
Peas	0.10	1***	0.10
Peppermint hay	1.5	41	1.5
Pineapple	0.1	13***	0.1/0.07 juice
Poultry meat by-products	TBD	100	0.00017**
Raspberries	0.10	13	0.10
Sheep, fat	TBD(1)	100	see cattle
Sheep, meat	TBD(1)	100	see cattle
Sheep, meat byproducts	TBD(1)	100	see cattle

Sorghum, grain	0.50	1	0.134*
Sugarcane	0.20	4	0.027*
Refined sugar			0.00018*
Molasses			0.088*
Vetch	2	1	2
Wheat, grain	0.50	1	0.136**
Wheat, bran	0.70		0.30**
Wheat, flour			0.019**
section 18 Catfish fillet	2	35***	2

Footnotes: Anticipated residues based on tolerances or taken from D169227, 02/13/1992, C. Swartz as indicated by (*) or D250038, 10/08/1998, R. Loranger as indicated by **.

% Crop treated data were obtained from a Lotus notes link to a QUA supplied by BEAD via email (6/14/2001) and supplemented with data from Alan Halvorson, BEAD/EAB, 04/27/2001 as indicated by (***)..

TBD To be determined.

Results and Discussion

Chronic Dietary Exposure Analysis:

A chronic dietary exposure analysis for diuron was performed utilizing DEEMTM exposure modeling software. The input values include the anticipated residues incorporating %CT and processing factors for commodities on which diuron is used. The calculated chronic exposure (residue x consumption) was compared to a cPAD of 0.003 mg/kg/day, which reflects a FQPA factor of 1X. The results of the chronic dietary analysis are presented in Table 3.

Estimated chronic dietary risk associated with the use of diuron do not exceed HED's level of concern (>100% cPAD) for any population subgroup examined. The chronic dietary risk estimates for the U.S. population and children aged 1-6 years are approximately 3% and 7%, respectively, of the cPAD. Approximately 40 % of the exposure to diuron from food is from orange juice and orange juice concentrate. The registrants have committed to label changes for the application of diuron to asparagus. There were

minimal changes in the chronic exposure estimates using data from the preemergence or postemergence applications of diuron to asparagus (Table 3).

Cancer Dietary Exposure Analysis:

Estimated cancer risk from exposure to diuron from food exceeds HED's level of concern ($>1.0 \times 10^{-6}$) for the US population. The lifetime cancer risk for the US population is approximately 2×10^{-6} (Table 4).

Table 3: Chronic Dietary Risk Estimates .

U.S. Environmental Protection Agency		Ver. 7.73	
DEEM Chronic analysis for DIURON		(1989-92 data)	
Residue file name: C:\WINDOWS\Desktop\diuron.RS7		Adjustment factor #2 used.	
Analysis Date 08-09-2001/14:32:37		Residue file dated: 08-09-2001/14:26:07/8	
Reference dose (RfD, Chronic) = .003 mg/kg bw/day			
=====			
Total exposure by population subgroup			

	Total Exposure		

Population Subgroup	mg/kg body wt/day	Percent of Rfd (ppm)	
-----	-----	0.26	2.8
U.S. Population (total)	0.000088	2.9%	3.4%
U.S. Population (spring season)	0.000088	2.9%	3.9%
U.S. Population (summer season)	0.000086	2.9%	3.1%
U.S. Population (autumn season)	0.000091	3.0%	3.3%
U.S. Population (winter season)	0.000087	2.9%	3.5%
Northeast region	0.000074	2.5%	3.1%
Midwest region	0.000074	2.5%	3.0%
Southern region	0.000113	3.8%	4.2%
Western region	0.000078	2.6%	3.1%
Hispanics	0.000094	3.1%	3.3%
Non-hispanic whites	0.000080	2.7%	3.3%
Non-hispanic blacks	0.000130	4.3%	4.5%
Non-hisp/non-white/non-black	0.000101	3.4%	4.7%
All infants (< 1 year)	0.000077	2.6%	2.6%
Nursing infants	0.000054	1.8%	1.8%
Non-nursing infants	0.000087	2.9%	2.9%
Children 1-6 yrs	0.000200	6.7%	6.7%
Children 7-12 yrs	0.000118	3.9%	4.0%
Females 13-19 (not preg or nursing)	0.000068	2.3%	2.3%
Females 20+ (not preg or nursing)	0.000073	2.4%	3.3%

Females 13-50 yrs	0.000069	2.3%	2.8%
Females 13+ (preg/not nursing)	0.000087	2.9%	3.2%
Females 13+ (nursing)	0.000084	2.8%	3.8%
Males 13-19 yrs	0.000098	3.3%	3.5%
Males 20+ yrs	0.000066	2.2%	2.8%
Seniors 55+	0.000083	2.8%	3.9%
Pacific Region	0.000080	2.7%	3.2%

Table 4: Cancer Dietary Risk Estimates.

U.S. Environmental Protection Agency Ver. 7.73
DEEM Chronic analysis for DIURON (1989-92 data)
Residue file name: C:\WINDOWS\Desktop\diuron.RS7 Adjustment factor #2 used.
Analysis Date 08-09-2001/14:39:27 Residue file dated: 08-09-2001/14:26:07/8
Q* = 0.0191

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Total exposure by population subgroup

Population Subgroup	Total Exposure	
	mg/kg body wt/day	Lifetime risk (Q*= .0191)
U.S. Population (total)	0.000088	1.68E-06
U.S. Population (spring season)	0.000088	1.67E-06
U.S. Population (summer season)	0.000086	1.64E-06
U.S. Population (autumn season)	0.000091	1.75E-06
U.S. Population (winter season)	0.000087	1.67E-06
Northeast region	0.000074	1.40E-06
Midwest region	0.000074	1.41E-06
Southern region	0.000113	2.15E-06
Western region	0.000078	1.49E-06
Hispanics	0.000094	1.79E-06
Non-hispanic whites	0.000080	1.53E-06
Non-hispanic blacks	0.000130	2.49E-06
Non-hisp/non-white/non-black	0.000101	1.94E-06

All infants (< 1 year)	0.000077	1.48E-06
Nursing infants	0.000054	1.03E-06
Non-nursing infants	0.000087	1.66E-06
Children 1-6 yrs	0.000200	3.81E-06
Children 7-12 yrs	0.000118	2.25E-06
Females 13-19 (not preg or nursing)	0.000068	1.30E-06
Females 20+ (not preg or nursing)	0.000073	1.39E-06
Females 13-50 yrs	0.000069	1.32E-06
Females 13+ (preg/not nursing)	0.000087	1.67E-06
Females 13+ (nursing)	0.000084	1.60E-06
Males 13-19 yrs	0.000098	1.87E-06
Males 20+ yrs	0.000066	1.26E-06
Seniors 55+	0.000083	1.59E-06
Pacific Region	0.000080	1.53E-06

Attachment 1. DEEM Residue Input File.

Filename: C:\WINDOWS\Desktop\diuron\diuron.RS7 Chemical: diuron

RfD(Chronic): .003 mg/kg bw/day NOEL(Chronic): 0 mg/kg bw/day

RfD(Acute): 0 mg/kg bw/day NOEL(Acute): 0 mg/kg bw/day

Date created/last modified: 08-09-2001/14:26:07/8

Program ver. 7.73

Food Code	Crop Grp	Food Name	Def Res (ppm)	Adj. Factors #1	Adj. Factors #2
40	14	Almonds	0.100000	1.000	0.010
52	11	Apples	0.016000	1.000	0.130
53	11	Apples-dried	0.016000	8.000	0.130
54	11	Apples-juice/cider	0.016000	1.300	0.130
377	11	Apples-juice-concentrate	0.016000	3.900	0.130

181	O	Artichokes-globe	0.300000	1.000	0.020
260	O	Asparagus	0.260000	1.000	0.530
72	O	Bananas	0.025000	1.000	0.140
73	O	Bananas-dried	0.025000	3.900	0.140
378	O	Bananas-juice	0.025000	1.000	0.140
265	15	Barley	0.100000	1.000	0.010
323	M	Beef-dried	0.000001	1.920	1.000
324	M	Beef-fat w/o bones	0.000003	1.000	1.000
325	M	Beef-kidney	0.000026	1.000	1.000
327	M	Beef-lean (fat/free) w/o bones	0.000001	1.000	1.000
326	M	Beef-liver	0.000050	1.000	1.000
321	M	Beef-meat byproducts	0.000050	1.000	1.000
322	M	Beef-other organ meats	0.000050	1.000	1.000
1	13A	Blackberries	0.100000	1.000	0.530
380	13A	Blackberries-juice	0.100000	1.000	0.530
7	13B	Blueberries	0.100000	1.000	0.290
2	13A	Boysenberries	0.100000	1.000	0.070
366	P	Chicken-byproducts	0.000170	1.000	1.000
368	P	Chicken-fat w/o bones	0.000170	1.000	1.000
367	P	Chicken-giblets(liver)	0.001500	1.000	1.000
385	P	Chicken-giblets (excl. liver)	0.000170	1.000	1.000
369	P	Chicken-lean/fat free w/o bones	0.000170	1.000	1.000
267	15	Corn grain-bran	0.086000	1.000	0.010
266	15	Corn grain-endosperm	0.086000	1.000	0.010
289	15	Corn grain-oil	0.086000	1.000	0.010
268	15	Corn grain/sugar/hfcs	0.086000	1.500	0.010
388	15	Corn grain/sugar-molasses	0.086000	1.500	0.010
237	15	Corn/pop	0.086000	1.000	0.010
238	15	Corn/sweet	0.066000	1.000	0.010
291	O	Cottonseed-meal	0.100000	1.000	0.110
290	O	Cottonseed-oil	0.020000	1.000	0.110
10	13B	Currants	0.100000	1.000	0.320
3	13A	Dewberries	0.100000	1.000	0.530
364	P	Eggs-white only	0.000027	1.000	1.000
363	P	Eggs-whole	0.000260	1.000	1.000
365	P	Eggs-yolk only	0.000690	1.000	1.000
44	14	Filberts (hazelnuts)	0.100000	1.000	0.140
352	F	Fish-finfish/freshwater	2.000000	1.000	0.350
330	M	Goat-fat w/o bone	0.000003	1.000	1.000
331	M	Goat-kidney	0.000026	1.000	1.000
333	M	Goat-lean (fat/free) w/o bone	0.000001	1.000	1.000
332	M	Goat-liver	0.000050	1.000	1.000
328	M	Goat-meat byproducts	0.000050	1.000	1.000
329	M	Goat-other organ meats	0.000050	1.000	1.000
12	13B	Gooseberries	0.100000	1.000	0.320

23	10	Grapefruit-juice	0.012000	2.100	0.470
441	10	Grapefruit-juice-concentrate	0.012000	8.260	0.470
448	10	Grapefruit peel	0.012000	1.000	0.470
22	10	Grapefruit-peeled fruit	0.012000	1.000	0.470
13	O	Grapes	0.021000	1.000	0.100
15	O	Grapes-juice	0.021000	1.200	0.100
392	O	Grapes-juice-concentrate	0.021000	3.600	0.100
195	O	Grapes-leaves	0.021000	1.000	0.100
14	O	Grapes-raisins	0.021000	4.300	0.100
315	O	Grapes-wine and sherry	0.021000	1.000	0.100
334	M	Horsemeat	0.000001	1.000	1.000
16	13B	Huckleberries	0.100000	1.000	0.290
28	10	Lemons-juice	0.050000	2.000	0.260
442	10	Lemons-juice-concentrate	0.050000	11.400	0.260
27	10	Lemons-peel	0.050000	1.000	0.260
26	10	Lemons-peeled fruit	0.050000	1.000	0.260
32	10	Limes-juice	0.050000	2.000	0.330
443	10	Limes-juice-concentrate	0.050000	6.000	0.330
31	10	Limes-peel	0.050000	1.000	0.330
30	10	Limes-peeled fruit	0.050000	1.000	0.330
4	13A	Loganberries	0.100000	1.000	0.330
46	14	Macadamia nuts (bush nuts)	0.100000	1.000	0.050
398	D	Milk-based water	0.000058	1.000	1.000
319	D	Milk-fat solids	0.000058	1.000	1.000
318	D	Milk-nonfat solids	0.000058	1.000	1.000
320	D	Milk sugar (lactose)	0.000058	1.000	1.000
911	O	Molasses-nfs	0.088000	1.000	0.040
399	15	Oats-bran	0.300000	1.000	0.010
269	15	Oats	0.100000	1.000	0.010
82	O	Olives	1.000000	1.000	0.240
300	O	Olive oil	1.000000	1.000	0.240
36	10	Oranges-juice	0.030000	1.800	0.510
33	10	Oranges-juice-concentrate	0.030000	6.700	0.510
35	10	Oranges-peel	0.030000	1.000	0.510
34	10	Oranges-peeled fruit	0.030000	1.000	0.510
85	O	Papayas-dried	0.500000	1.800	0.130
86	O	Papayas-juice	0.500000	1.500	0.130
84	O	Papayas-pulp	0.500000	1.000	0.130
65	12	Peaches	0.100000	1.000	0.100
66	12	Peaches-dried	0.100000	7.000	0.100
402	12	Peaches-juice	0.100000	1.000	0.100
56	11	Pears	0.016000	1.000	0.090
57	11	Pears-dried	0.016000	6.250	0.090
404	11	Pears-juice	0.016000	1.000	0.090
240	6C	Peas (garden)-dry	1.000000	1.000	0.010

241	6AB	Peas (garden)-green	1.000000	1.000	0.010
405	6B	Peas-succulent/blackeye/cowpea	1.000000	1.000	1.000
47	14	Pecans	0.100000	1.000	0.030
310	O	Peppermint	1.500000	1.000	0.410
311	O	Peppermint-oil	1.500000	1.000	0.410
90	O	Pineapples-dried	0.100000	5.000	0.130
91	O	Pineapples-juice	0.070000	1.700	0.130
406	O	Pineapples-juice-concentrate	0.070000	6.300	0.130
89	O	Pineapples-peeled fruit	0.100000	1.000	0.130
50	O	Pistachio nuts	0.100000	1.000	0.050
344	M	Pork-fat w/o bone	0.000003	1.000	1.000
345	M	Pork-kidney	0.000026	1.000	1.000
347	M	Pork-lean (fat free) w/o bone	0.000001	1.000	1.000
346	M	Pork-liver	0.000050	1.000	1.000
342	M	Pork-meat byproducts	0.000050	1.000	1.000
343	M	Pork-other organ meats	0.000050	1.000	1.000
362	P	Poultry-other-fat w/o bones	0.000170	1.000	1.000
361	P	Poultry-other-giblets(liver)	0.001500	1.000	1.000
360	P	Poultry-other-lean (fat free) w/	0.000170	1.000	1.000
5	13A	Raspberries	0.100000	1.000	0.130
338	M	Sheep-fat w/o bone	0.000003	1.000	1.000
339	M	Sheep-kidney	0.000026	1.000	1.000
341	M	Sheep-lean (fat free) w/o bone	0.000001	1.000	1.000
340	M	Sheep-liver	0.000050	1.000	1.000
336	M	Sheep-meat byproducts	0.000050	1.000	1.000
337	M	Sheep-other organ meats	0.000050	1.000	1.000
275	15	Sorghum (including milo)	0.134000	1.000	0.010
283	O	Sugar-cane	0.000180	1.000	0.040
284	O	Sugar-cane/molasses	0.088000	1.000	0.040
37	10	Tangelos	0.050000	1.000	0.470
38	10	Tangerines	0.050000	1.000	0.300
39	10	Tangerines-juice	0.050000	2.300	0.300
420	10	Tangerines-juice-concentrate	0.050000	7.350	0.300
355	P	Turkey-byproducts	0.000170	1.000	1.000
357	P	Turkey--fat w/o bones	0.000170	1.000	1.000
356	P	Turkey-giblets (liver)	0.001500	1.000	1.000
358	P	Turkey- lean/fat free w/o bones	0.000170	1.000	1.000
449	P	Turkey-other organ meats	0.000170	1.000	1.000
431	14	Walnut oil	0.100000	1.000	0.120
48	14	Walnuts	0.100000	1.000	0.120
278	15	Wheat-bran	0.300000	1.000	0.010
279	15	Wheat-flour	0.019000	1.000	0.010
277	15	Wheat-germ	0.300000	1.000	0.010
437	15	Wheat-germ oil	0.300000	1.000	0.010
276	15	Wheat-rough	0.136000	1.000	0.010

**cc: JS Punzi (RRB2), Diuron List B File, Diuron Subject File, RF, LAN. RD/I: RRB2 Chem Team Review (9/12/01), Dietary Exposure SAC (9/12/01).
7509C: RRB2: J. Punzi: CM#2:Rm 712M: 703-305-7727.**